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MARK RIDLEY-THOMAS
SUPERVISOR, SECOND DISTRICT

September 18, 2012

Mr. David Shelow
U.S. Environmental Protection Agency
Mail Code C304-06
109 T.W. Alexander Drive
Research Triangle Park, NC 27709

Re: Air Toxics Monitoring in the Baldwin Hills Community Standards District of Los Angeles County

Dear Mr. Shelow:

The Los Angeles County Department of Regional Planning is overseeing the preparation and implementation of an Air Quality Monitoring Study, including an air toxic assessment, for the Inglewood Oil Field (Oil Field) located in the Baldwin Hills Community Standards District (CSD) of Los Angeles County. In October 2008, the County of Los Angeles approved the CSD, an amendment to its zoning code establishing development standards and operating procedures for oil and gas production operations for the unincorporated portions of the Inglewood Oil Field located in the Baldwin Hills Zoned District. The Oil Field is currently operated by the Plains Exploration and Production (PXP) Company.

During 2005 and 2006, the County of Los Angeles prepared an Environmental Impact Report (EIR) that addressed the impact of potential future development at the Oil Field. The Final EIR contains a Health Risk Assessment (HRA) that evaluated the health risks associated with operations at the Oil Field; the HRA is consistent with the requirements of the South Coast Air Quality Management District (SCAQMD) and followed the risk assessment guidelines developed by the Office of Environmental Health Hazard Assessment (OEHHA).

However, a number of parties challenged the adequacy of the EIR in court, and on July 15, 2011, a settlement was reached that allowed the EIR lawsuits to be dismissed. The agreement is available at http://www.inglewoodoilfield.com/baldwin-hills-csd-settlement/. One key provision of the settlement agreement is the execution of an Air Quality Monitoring Study and accompanying risk assessment. The maximum total funding available from the County of Los Angeles for this project is $250,000.

The Air Quality Monitoring Study's primary objectives are to quantify the air toxics emissions from the Oil Field operations, which include drilling and well workovers, and to assess the health risk of both acute and chronic exposure to air toxics emissions from the Oil Field operations. In addition, to the extent feasible, the study will determine and distinguish the major sources of toxic air emissions within the areas surrounding the Oil Field as well as assess the Oil Field's contribution to the overall acute and chronic health risk in the areas surrounding the Oil Field.

An open RFP was issued in January 2012, and a contract was entered with Sonoma Technology, Inc. (STI) in June 2012. STI prepared a draft work plan and presented these results to the public at a meeting on August 23, 2012; current project documents are available at http://planning.lacounty.gov/baldwinhills/documents.

The current study design is based on prioritized measurements of toxics ranked using the 2005/2006 EIR. The report indicates that diesel PM (DPM), metals, VOCs, and carbonyl compounds are the highest-ranked pollutants. Because DPM is the highest priority toxic, the study work plan calls for Aethalometer measurements of black carbon (as a proxy for DPM) from November 2012 through November 2013 at four monitoring sites within the Oil Field. As the second-highest set of priority toxics, 24 metals emitted from drilling and workovers will be targeted during a two-month monitoring period using a semi-continuous XACT 625 x-ray fluorescence spectrometer. Finally, as the lowest-rated pollutants, toxic VOCs and carbonyls will be analyzed during a two-week monitoring period using Proton Transfer Reaction Time of Flight Mass Spectrometry (PTR-TOFMS) at 5-minute resolution. A 10-m meteorological tower will provide 1-min data over the full year.

The existing study design and instrumentation is expected to provide excellent data for assessing and characterizing Oil Field emissions; assessing Oil Field contributions relative to confounding emissions sources such as highways, airports, and local emissions; and assessing acute and chronic risk for DPM and the metals. However, the limited duration of the PTR-TOFMS deployment may not be sufficiently long to ensure representative data for chronic risks. Additionally, other toxic air pollutants emitted at the Oil Field, especially hydrogen sulfide, were not targeted because of the prioritization scheme. However, hydrogen sulfide is a major concern for the community.

This letter requests supplemental funding from EPA for additional monitoring to better address concerns of the local community and better address the monitoring objectives of the study. We note that the Baldwin Hills Study is a candidate for the Community-Scale Air Toxics Monitoring program, meeting the emissions characterization, risk characterization, and methods evaluation objectives. Moreover, oil and gas field emissions are of particular interest to EPA, especially from hydraulic fracturing processes. Existing study funds could easily be leveraged by EPA to help meet national objectives. A prioritized list of monitoring and analysis options are attached.

We look forward to hearing your thoughts on this monitoring study and are available to discuss it with you at your earliest convenient opportunity.

With hope,

Mark Ridley-Thomas

MARK RIDLEY-THOMAS
Supervisor, Second District

cc: Lewis Weinstock, EPA OAQPS
Meredith Kurpuis, EPA Region 9
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Gary Norris, EPA ORD
Paul Roberts, STI
Elaine Lemke, County Counsel
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Prioritized List of Monitoring and Analysis Options

1. Extending the duration of the planned PTR-TOFMS deployment for an additional two to six weeks to better characterize VOC and carbonyl concentrations, assess chronic risk, and use source apportionment methods to identify emissions sources from the Oil Field.

   This would cost an additional $25,000 to $75,000, depending on the extended deployment time.

2. Extending the duration of the planned XACT 625 deployment by one to two months to better characterize metals emissions from drilling operations, well workovers, and fugitive dust emissions within the Oil Field, and to ensure a more representative time period for assessing chronic risk.

   This would cost an additional $15,000 to $30,000, depending on the duration.

3. Adding hydrogen sulfide and methane measurements using a Picarro cavity ring-down spectrometer for a duration ranging from 2 weeks to 5 months. This is the lowest priority option from a toxicity and emissions characterization perspective, but it would help to assuage community concerns about ongoing hydrogen sulfide measurements being made by PXP adjacent to active wells within the Oil Field. Additionally, the fast response time of the Picarro analyzer could be used to perform mobile monitoring within and around the Oil Field to spatially characterize leaks and plumes.

   Costs for this instrument deployment range from ~$14,000 to $45,000, depending on the duration.